APPENDIX D5

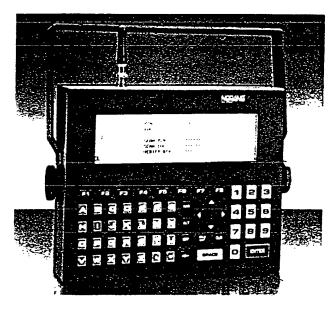
Brochure entitled "RT5910 Mobile Mount Radio Terminal (Two Sides). Copyright 1991 by Norand Corporation

The NORAND® RT5910 Mobile Mount

Terminal for Challenging

Industrial Environments





SYSTEM FEATURES

- Long life Super Twist Transflective 16-line x 80-character liquid crystal display with graphic display capabilities
- Sealed elastomer 58-key alphanumeric with 32 function keyboard
- Peripheral port (sealed) 15-pin male
 D-subminiature for connection to RS232 devices
- Scanner interface (sealed) 9-pin
 D-subminiature connector for 5 volt scanning
- Rugged case enclosure built to NEMA 3 standards for harsh environments
- Incorporates the same display screen formatting as the RT3210 Radio Data Terminal and the RD3990 Remote Display for application transparency

The RT5910 Mobile Mount Terminal is the newest member of the NORAND® Radio Frequency (RF) Vehicle Communications System. The RT5910 Terminal's rugged design was developed for the harshest forklift-mount applications.

The Super Twist Transflective liquid crystal display (LCD) of the RT5910 has graphic display capabilities for enhanced readability and versatility. The LCD is backlit using an amber light emitting diode (LED) light pipe and is designed to operate for 50,000 to 75,000 hours without failure.

The display screen formatting of the RT5910 is compatible with the screen formats used in the RT3210 Radio Data Terminal and RD3990 Remote Display. The achievement of this application transparency allows the duplication of display screens without the need for host system software modifications.

The RT5910 Terminal is designed to meet NEMA 3 standards and incorporates a sealed elastomer keyboard. This 58-key alphanumeric keyboard has 32 functions keys to simplify and speed the data entry process. The oversized keys are ideal for the large-handed or gloved user.

The Mobile Mount Radio Terminal supports 5 volt scanning. Also, a 15-pin RS232 port allows connection to a variety of peripherals such as bar code printers and other data collection devices.

The innovative architecture of the RT5910 requires no special user programming and integrates quickly and easily into any host computer system. A few command code additions to existing software is generally all that is needed to get the system up and running in your operation. This simple, yet comprehensive RF system approach from Norand is unparalleled in the industry.





PRODUCT FEATURES

Transceiver: Incorporates a 2 watt (UHF) frequency modulated (FM) radio transceiver controlled by a microprocessor. Type accepted per FCC Rules & Regulations, Parts 2 & 90 Private Land Mobile Radio Service

Liquid Crystal Display (LCD): Super Twist Transflective LCD with configurable 16-line x 80-character display (one line of display designated for annunciators) with contrast control adjustment feature

Backlighting: LCD is backlit using an amber light emitting diode (LED) light pipe

Annunciators: TX (transmitting), RX (receiving), CL (communications loss), ALT (alternate), FUNC (function), and + (9600 baud), are displayed on the bottom line of the LCD

Keyboard: Sealed elastomer 58-key alphanumeric tactile feel with 32 function keys. ABCD & QWERTY options

Audio Alert: An audible buzzer which is volume controlled via the keyboard

Self-Diagnostics: Performed on power-up with built-in user accessible diagnostics

Static Shock Protection: RT5910 Mobile Mount Radio is hardened against electrostatic discharge up to 20,000 volts

Shielding: Conforms to FCC Part 15 for Class A computing devices

RS232 Support: A sealed 15-pin male D-subminiature connector allows connection to a variety of peripherals such as bar code printers and other data collection devices

Scanner Port: A sealed 9-pin D-subminiature connector with 5 volt scanning capability

Power Input Connector: A sealed 2-pin circular locking connector for power connection

Power Conversion: Converts up to 72VDC forklift battery to 12VDC operating voltage

RAM: 128K bytes x 8 bits, nonvolatile with lithium battery backup

ROM: 190K bytes x 8 bits

Microprocessor: 16 bit

PHYSICAL CHARACTERISTICS

Size: 12.5" x 10" x 3" (LWD) (31.75cm x 25.4cm x 7.62cm)

Antenna Length: 3.25 inches (8.25cm)

Weight: 12 pounds (5.4g)

ENVIRONMENTAL CHARACTERISTICS

Operating Temperature: -4° to 140°F (-20° to 60°C)

Storage Temperature: -22° to 158°F (-30° to 70°C)

Humidity: 0 to 90% noncondensing

Standards: Designed to meet UL, CSA, and NEMA 3 standards and MIL-STD-810D



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